District: Town of Northbridge

School Name: W. Edward Balmer Elementary School

Recommended Category: Preferred Schematic Date: February 7, 2018

Recommendation

That the Executive Director be authorized to approve the Town of Northbridge, as part of its Invitation to Feasibility Study, to proceed into Schematic Design to replace the existing W. Edward Balmer and the Northbridge Elementary Schools, with a new facility that serves grades PK-5 on the existing site of the W. Edward Balmer Elementary School. MSBA staff has reviewed the Feasibility Study and accepts the District's preferred solution.

District Information				
District Name	Town of Northbridge			
Elementary School(s)	Northbridge Elementary School (PK-1)			
• ` ` ` ` `	W. Edward Balmer School (2-4)			
Middle School(s)	Northbridge Middle School (5-8)			
High School(s)	Northbridge High School (9-12)			
Priority School Name	W. Edward Balmer Elementary School			
Type of School	Elementary School			
Grades Served	2-4			
Year Opened	1968			
Existing Square Footage	70,857			
Additions	N/A			
Acreage of Site	30 acres			
Building Issues	The District identified deficiencies in the following areas: - Mechanical systems - Electrical systems - Envelope - Windows - Roof - Accessibility In addition to the physical plant issues, the District reported that the existing facility does not support the delivery of its educational program as well as existing and projected overcrowding.			
Original Design Capacity	Unknown			
2016-2017 Enrollment	527			
Agreed Upon Enrollment	Study Enrollment includes the following configurations: 510 students (grades 2-4) 1,030 students (grades K-5) (Preferred Solution)			
Enrollment Specifics	Contingent upon the Board's approval of the preferred solution, the District will sign a Design Enrollment Certification for 1,030 students for grades K-5, for a project that will serve grades PK-5.			
Total Project Budget – Debt Exclusion Anticipated	Yes			

MSBA Board Votes				
Invitation to Eligibility Period	March 30, 2016			
Invitation to Feasibility Study	November 9, 2016			
Preferred Schematic Authorization	On February 14, 2018 Board agenda			
Project Scope & Budget Authorization	District is targeting Board authorization on June			
	27, 2018			
Feasibility Study Reimbursement Rate	57.11%			
(Incentive points are not applicable)				

Consultants	
Owner's Project Manager (the "OPM")	Symmes Maini & McKee Associates
Designer	Dore & Whittier Architects, Inc.

Discussion

As part of the Feasibility Study, the District determined that the potential consolidation of its two existing schools along with moving its 5th grade students from its middle school to an elementary school environment warrants consideration. In response to the District's request to study options that could address these goals the MSBA agreed with the District on the benefits of evaluating two study enrollments, one for 510 students in grades 2-4 and a second enrollment to evaluate solutions for 1,030 students in grades K-5.

The existing W. Edward Balmer Elementary School is a 70,857 square foot building located on a 30-acre site and currently serves grades 2-4. The existing facility was originally constructed in 1968 as an elementary school that served students in grades 2-4. In addition to the W. Edward Balmer Elementary School, the District evaluated the existing Northbridge Elementary School, located 1.6 miles from the W. Edward Balmer School, a 56,478 square foot three-story building on a 2.72-acre site adjacent to the District's School Administration Building. The Northbridge Elementary School, serving grades PK-1, was constructed in 1952. A major addition that included classrooms, a cafeteria, and gymnasium was constructed in 1982 and six portable classrooms were added in 2000.

The District identified numerous deficiencies in the Statement of Interest for the W. Edward Balmer Elementary School that are associated with: outdated mechanical, electrical and plumbing systems, non-compliant accessibility conditions, overcrowding, and space constraints inhibiting the District's ability to deliver its educational program. The District also identified poor energy efficiency performance of the existing facility because of the building envelope, roof conditions, and single pane windows.

The District identified numerous deficiencies in the Statement of Interest for the Northbridge Elementary School that are associated with: outdated mechanical, electrical, and plumbing systems and overcrowding. The District also identified poor energy efficiency performance of the existing facility because of the building envelope, roof conditions, and single pane windows.

In conjunction with its consultants, the District performed a comprehensive assessment of the existing conditions and the educational program, and received input from educators, administrators, and facilities personnel. Based on the findings of this effort, the District and its

consultants initially studied ten preliminary options that included two capital improvements to the existing buildings, three addition/renovation configurations, and five new construction options, as presented below.

Option	Description of Preliminary Options
A1	Renovation Only- W. Edward Balmer School
A2	Renovation Only- Northbridge Elementary School
B1	Addition/Renovation to Balmer School for 510 students
B2	New Construction on Balmer Site for 510 students
В3	New Construction on Balmer Site for 510 students
C1	Addition/Renovation to Balmer School for 1,030 students
C2	Addition/Renovation to Balmer School for 1,030 students
C3	New Construction on Balmer Site for 1,030 students
C4	New Construction on Balmer Site for 1,030 students
C5	New Construction on Balmer Site for 1,030 students

As a result of further evaluation and refined plans, the District determined that the options for the grades K-5 configuration on the W. Edward Balmer Elementary School site best meet the needs of the educational program and the District. The following is a list of the preliminary alternative options that were further evaluated:

Option	Description				
A1/A2	Capital Improvements at the existing W. Edward Balmer Elementary School and				
	Northbridge Elementary School.				
B2	New Construction at the existing W. Edward Balmer Elementary School – <i>Two</i>				
	story building (Grades 2-4 – 510 Students)				
C2	Addition/Renovation at the existing W. Edward Balmer Elementary School – <i>Two</i>				
	story building (Grades PK-5 – 1,030 Students)				
C3.1A	New Construction at the existing W. Edward Balmer Elementary School – <i>Two</i>				
	story building (Grades PK-5 – 1,030 Students)				
C3.1B	New Construction at the existing W. Edward Balmer Elementary School – <i>Three</i>				
	story building (Grades PK-5 – 1,030 Students)				
C3.2	New Construction at the existing W. Edward Balmer Elementary School – <i>Three</i>				
	story building, rear of the site (Grades PK-5 – 1,030 Students)				
C3.3	New Construction at the existing W. Edward Balmer Elementary School – <i>Three</i>				
	story building, rear/east site of the site (Grades PK-5 – 1,030 Students)				
C5	New Construction at the existing W. Edward Balmer Elementary School – <i>Three</i>				
	story building, front of the site (Grades PK-5 – 1,030 Students)				

Upon further review, MSBA staff and the District agreed to eight final options for further development and consideration in the final evaluation and development of preliminary design pricing as presented below. Please note that "Option A1" – Base Repair was carried for comparison only and was not further developed as part of the final evaluation of options.

Summary of Preliminary Design Pricing for Final Evaluation of Options

Option (Description)	Total Gross Square Feet	Square Feet of Renovated Space (cost*/sq. ft.)	Square Feet of New Construction (cost*/sq. ft.)	Site, Building Takedown, Haz Mat. Cost*	Estimated Total Construction ** (cost*/sq. ft.)	Estimated Total Project Costs
Option A1: 'Base Repair'	71,871	71,871 \$306/sq. ft.	0 \$0/sq. ft.	\$4,151,856	\$26,162,939 \$364/sq. ft.	\$32,746,342
Option B2: New Construction; Grades 2-4	89,283	0 \$0/sq. ft.	89,283 \$448/sq. ft.	\$12,077,224	\$52,062,899 \$583/sq. ft.	\$66,909,793
Option C2: Addition /Renovation; Grades PK-5	171,530	71,871 \$386/sq. ft.	99,659 \$459/sq. ft.	\$10,797,913	\$84,356,025 \$492/sq. ft.	\$108,686,010
Option C3.1A: New Construction; Grades PK-5	171,530	0 \$0/sq. ft.	171,530 \$412/sq. ft.	\$12,581,439	\$83,350,421 \$486/sq. ft.	\$107,434,257
Option C3.1B: New Construction; Grades PK-5***	171,530	0 \$0/sq. ft.	171,530 \$401/sq. ft.	\$12,658,967	\$81,453,196 \$475/sq. ft.	\$105,148,101
Option C3.2: New Construction; Grades PK-5	171,530	0 \$0/sq. ft.	171,530 \$403/sq. ft.	\$12,672,412	\$81,858,580 \$477/sq. ft.	\$105,636,589
Option C3.3: New Construction; Grades PK-5	171,530	0 \$0/sq. ft.	171,530 \$425/sq. ft.	\$12,633,759	\$85,556,706 \$499/sq. ft.	\$110,092,830
Option C5: New Construction; Grades PK-5	171,530	0 \$0/sq. ft.	171,530 \$402/sq. ft.	\$10,423,377	\$79,335,426 \$463/sq. ft.	\$102,596,189

^{*} Marked up construction costs

The District has selected "Option C3.1B" new construction, which replaces the existing W. Edward Balmer and Northbridge Elementary Schools with a single facility serving students in grades PK-5, on the existing site of the W. Edward Balmer Elementary School, as the preferred solution to proceed into Schematic Design. The District selected this option as its preferred solution because it best meets the needs of the District's educational program, allows the school community to create its ideal learning environment for increased student and teacher collaboration, and creates a level of educational flexibility and adaptation as the educational program continues to evolve.

"Option A1" (Base Repair), "Option B2" (Grades 2-4) and "Options C2, C3.1A, C3.2, C3.3 and C5" (Grades PK-5) were not selected for further evaluation. The District determined that "Options A1 and B2" were not viable solutions because the existing structure is not able to address the

^{**} Does not include construction contingency

^{***}District's preferred solution

educational needs of the District and "Option B2" only addresses the issue for Grades 2-4. These options create compromised alternatives for flexible learning spaces and overall space-planning.

Similarly, options associated with the "C" series, with the exception of "C3.1B", were determined to not be viable solutions due to the extent of phased construction and site configuration that would increase the project costs and cause disruption to the students for "Option C2 and C3.1A". Furthermore, "Options C3.2, C3.3, and C5" were determined to not be viable because it would comprise the relationship of the educational classrooms to the outdoor learning spaces, spatial adjacencies and building location, thus, resulting in safety and security concerns to the facility.

The District presented its proposed project to the MSBA Facilities Assessment Subcommittee ("FAS") on January 24, 2018. At that meeting, FAS members raised a number of topics regarding: the District's preferred solution and relationship to the educational program; consideration of the location and delivery of programmatic spaces associated with the maker space and extended learning areas in the lower and upper grades; the flexibility of the design for the delivery of the District's current and future curriculum; the need to pursue opportunities for efficiency during further development; school scheduling and its impact on the proposed curriculum delivery; appreciation of the massing and solar orientation addressed in the proposed design; and logistical challenges regarding site circulation.

MSBA staff reviewed the conclusions of the Feasibility Study, all subsequent submittals, and the enrollment data with the District and found:

- 1) That the options investigated were sufficiently comprehensive in scope, the approach undertaken in this study was appropriate, and the District's preferred solution is reasonable and cost-effective, and meets the needs identified by the District.
- 2) The District has submitted an operational budget for educational objectives and a capital budget statement for MSBA review.
- 3) The District's Schematic Design submittal will be subject to final review and approval by the Department of Elementary and Secondary Education, as part of the Schematic Design submittal, prior to a Project Scope and Budget Agreement.
- 4) Subject to Board approval, the MSBA will participate in a project that includes spaces that meet MSBA guidelines, with the exception of variations previously agreed to by the MSBA. All proposed spaces will be reviewed during the Schematic Design phase.
- 5) As part of the Schematic Design phase, the District will work with the MSBA to determine a mutually agreeable methodology to differentiate eligible costs from ineligible costs.

Based on the review outlined above, staff recommends that the Town of Northbridge be approved to proceed into Schematic Design to replace the existing W. Edward Balmer and the Northbridge Elementary Schools, with a new facility that serves grades PK-5 on the existing site of the W. Edward Balmer Elementary School.